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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/595,316

04/07/2006

Peter Quell

SCH-16606

7356

40854 7590 07/08/2008

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EXAMINER

WIEHE, NATHANIEL EDWARD

ART UNIT

PAPER NUMBER

3745

MAIL DATE

DELIVERY MODE

07/08/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/595,316	<b>Applicant(s)</b> QUELL ET AL.	
	<b>Examiner</b> NATHANIEL WIEHE	<b>Art Unit</b> 3745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-17 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 14-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 April 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>04072006</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

The information disclosure statement (IDS) submitted on 7 April 2006 is noted. The submission is in compliance with the provisions of 37 CFR 1.97 and 1.98. Accordingly, the information disclosure statement is being considered by the examiner.

### ***Claim Rejections - 35 USC § 112***

Claims 12 and 14-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 12 recites the limitation "element is air-permeable at least segment-wise, for instance in the form of a grid or perforations" in lines 2-3. Such a limitation is unclear since it can not be determined if the claim requires only an air-permeable element or an element incorporating a grid or perforated structure.

Claims 14-17 recites the limitation "a planar element as claimed". There is insufficient antecedent basis for this limitation in the claim, since claim 1, from which all these claims depend directly or indirectly is directed to a rotor blade and not solely a planar element. Therefore, it is unclear as to what element, the blade or the individual planar element, is being claimed.

Claim 17 also recites the limitation “metal, for instance a high grade steel, or of aluminum, plastic, compound material such as Glass Fiber-Reinforced Plastic or Carbon Fiber-Reinforced Plastic, or a combination of the materials” in lines 2-4. Such a limitation is unclear since it can not be determined if the claim requires metal or specifically high grade steel or aluminum and further compound materials or specifically glass or carbon fiber reinforced plastics.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-7 and 14 and 15, as far as they are definite, are rejected under 35 U.S.C. 102(b) as being anticipated by Ledingham (GB 2 374 331 A). Ledingham discloses blade (1), which may be utilized as a wind turbine blade, that includes planar elements (4) mounted to the suction side of the blade and running in the direction of the incident airflow. The elements inherently reduce cross-flow along the blade due to their position and size. Ledingham's elements (4) run the entire width of the suction side. There are several of the elements (4) mounted along the suction side of the blade that are longitudinal straight and perpendicular to the radius of the blade.

Claims 1,4,6-11 and 14-17, as far as they are definite, are rejected under 35 U.S.C. 102(b) as being anticipated by Corten (WO02/08600). Corten discloses a wind-driving rotor blade (1) having a relative thickness which decreases toward the outside

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from the blade root (2) to the blade tip. The blade includes a pressure side and a suction side including planar elements (8) that extend in the direction of incident flow over the blade. Although, Corten identifies the planar elements (8) as "vortex generator" the location and shape of the elements would also reduce cross-flow along the length of the blade (1). There are several of these elements (8) and they are straight in their longitudinal direction. The elements are located within a zone extending from the blade root to one third of the length of the blade (See Fig. 1) and are located within the transition range, i.e. the section of the blade between the root (2) and the lift generating contour (5). The elements are preferable punched out of strip material

### ***Prior Art***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US Pat. No. 6,910,867 is provided as an equivalent to WO02/08600. U.S. Pat. No. 7,234,921 is provided as an English language equivalent to RU 2218477. The patents issued to Currie and Puckett discloses various embodiments of propellers having rib elements to prevent or direct cross-flow along the blades.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to NATHANIEL WIEHE whose telephone number is (571)272-8648. The examiner can normally be reached on Mon.-Thur. and alternate Fri., 7am-4:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Look can be reached on (571)272-4820. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/NATHAN WIEHE/  
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